

# DEFENSE EQUAL OPPORTUNITY MANAGEMENT INSTITUTE DIRECTORATE OF RESEARCH

## WORKGROUP CLIMATES FOR ACCEPTANCE OF DIVERSITY: RELATIONSHIP TO GROUP COHESIVENESS AND PERFORMANCE

by

Robert E. Niebuhr, Ph.D.

Auburn University

Summer Faculty Research Fellow  
and

Stephen B. Knouse, Ph.D.

University of Southwestern Louisiana

Summer Faculty Research Fellow  
and

Mickey R. Dansby, Ph.D.

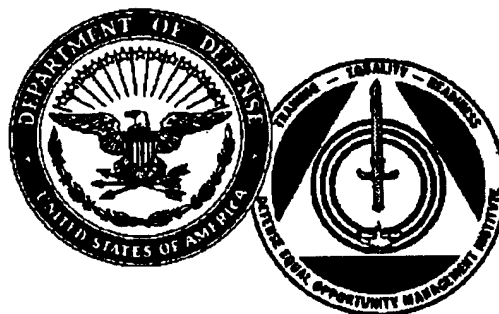
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## **Abstract**

The present study investigated the relationships between discriminatory climates (racism and sexism), group cohesiveness, and group performance for two samples--a state government agency and a military unit. Perceived racism and sexism correlated significantly with group cohesiveness and performance. Similar to previous findings, cohesiveness was also significantly correlated with group performance for both samples. Discussion focused on managing diversity and cohesiveness in work groups and on future research into discriminatory climates and cohesiveness.

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## **WORKGROUP CLIMATES FOR ACCEPTANCE OF DIVERSITY: RELATIONSHIP TO GROUP COHESIVENESS AND PERFORMANCE**

Cohesiveness is a key concept in social research. It has served a central role in mediating group formation, maintenance of the group, and group productivity (Bollen & Hoyle, 1990). Social researchers and theoreticians have defined cohesiveness in a variety of ways: "tendency for a group to stick together and remain united in the pursuit of its goals and objectives" (Carron, 1982, p. 124), commitment and attraction to the group (Cartwright & Zander, 1968), and more subjectively a "we feeling" of emotional climate (Vraa, 1974).

Early conceptualizations of cohesiveness viewed it as a function of the "total field of forces which act on members to remain in the group" (Festinger, Schachter, & Back, 1950, p. 164). Among these forces are similarity among members, which leads to increased liking within the group (Stephan, 1985), and common goals, which focus members on group performance (Berkowitz, 1954). A central factor is rewardedness - the benefits of belonging to the group that outweigh the costs (Berkowitz, 1980). Pleasant interaction among members is also important (Insko & Wilson, 1977) as well as degree of harmony in intergroup relations and positive treatment by group members (Stephan, 1985). Conversely, personal animosities among group members can be debilitating because they generate friction and dissension (Jackson, 1992). In reviewing the cohesiveness literature, Mudrack (1989) concluded that a "field of forces" conceptualization based on a combination of "attraction to the group" and "commitment to the group task" appeared to best represent the complexity of this variable. Moreover, in a more recent meta-analysis of this literature, Mullen and Copper (1994) found that commitment to the group task is the critical component in group cohesiveness.

The type of group may influence how cohesiveness develops. Task-oriented cohesion and interpersonal-oriented cohesion are linked to role requirements in the group, social support of group members, individual group member performance, and absenteeism from group activities (Zaccaro, 1990).

Task-oriented groups may develop cohesion from experiencing successful performance (Greene, 1989; Norris & Niebuhr, 1980). Indeed, successful outcomes may produce mutually sought after rewards that satisfy needs of individual group members (Lott & Lott, 1965). Further, success may increase group-serving attributions of performance (e.g., individual members believe that success was due to group effort), which in turn enhance cohesiveness (Taylor, Doria, & Tyler, 1983). On the other hand, negative outcomes (e.g., failure and defeat) can reduce cohesiveness because individual needs have not been met (Lott & Lott, 1965). In sum, commitment to the task may be a key factor in building cohesiveness (Mullen & Copper, 1994).

Relationship-oriented (interpersonally-oriented) groups may develop cohesion due to a similarity of values among members, which provide bases for mutual support (Anderson, 1975). Group members may be attracted to each other because of these mutually satisfying relationships (Lott & Lott, 1965). Moreover, in relationship-oriented groups cohesion can develop because members respect each other's view (Mael & Alderks, 1993). Increased communication among relationship-oriented members can further enhance cohesiveness (Lott & Lott, 1965).

Work groups are becoming more racially, ethnically, and gender diverse (Cox, 1993). The influence of workforce diversity on group dynamics is complex. On the one hand, groups of diverse composition (heterogeneous groups) may require more time and effort to resolve individual differences in perspectives and approaches to problems. Moreover, group compliance systems and cooperative actions may be adversely affected (Heckathorn, 1993). Conversely, the differences in perspectives and approaches of such heterogeneous groups may produce more creative decisions (Thornburg, 1991) and allow the group to deal more effectively with complex problems that require critical analysis and innovative solutions (McCleod, Lobel, & Cox, 1992; Nemeth, 1985).

The influence of work group diversity on group cohesiveness has been largely unexplored and is thus unclear. Diversity may inhibit cohesiveness because group members can find fewer commonalities upon which to build mutual goals and supportiveness. For example, Terborg, Castore, and DeNinno (1976) found that groups with less similar attitudes among members reported less cohesiveness than did groups whose members exhibited similar attitudes. Further, friction may develop between subgroups with different characteristics (e.g., age and gender), which in turn adversely affects cohesiveness and performance. On the other hand, diversity may not adversely affect cohesiveness if an environment of mutual respect and positive treatment can develop free from group bias. In a study of military personnel, Siebold and Lindsay (1994) found that the percentage of non-white soldiers in a platoon was not related to group cohesiveness.

Two types of group bias, racism and sexism, can produce discriminatory climates in work groups. Racism and sexism have been shown to be intercorrelated and related to several variables: lower level of education, lower cognitive sophistication, anti-egalitarianism, conservatism, and gender (males exhibit stronger racism and sexism than females) (Sidanius, 1993). Moreover, racism and sexism can be strongly ingrained beliefs emphasizing group differences where a core group (e.g., whites or males) values itself highly and contrasts itself sharply with a perceived outgroup (e.g., minorities or females) (Henley & Pincus, 1978). Based upon these studies, it is hypothesized that the presence of racism and sexism in groups produces a discriminatory climate that is detrimental to group cohesion and performance.

The classic Seashore (1954) study provides theoretical support for the influence of group cohesiveness on performance. In his study, high cohesion groups used various communication mechanisms to produce greater compliance to group norms than occurred with the low cohesion groups. Although Stogdill (1972) in his review of the research on cohesiveness and performance, found only mixed support for the effect of cohesion on performance he did find a positive relationship in 12 out of 23 studies. In re-examining Stogdill's review, Mudrack (1989) found that definitional and measurement problems were contributing factors to the mixed pattern of relationships between cohesiveness and group performance.

Several meta-analyses have explored the relationship of cohesiveness and performance. Oliver (1988) found a mean  $r$  of 0.32 with 14 military and civilian field studies, while Evans and Dion (1991) reported a mean  $r$  of 0.36 for 16 field and experimental studies. Recently, Mullen & Copper (1994) provided the most ambitious effort to date with a review of 49 studies. Among their findings was evidence for the directionality of cohesiveness and performance. A meta-analysis of cross-lagged panel

correlations for seven longitudinal studies demonstrated a small but significant cohesiveness @ performance relationship (mean  $r = 0.25$ ) and a larger significant performance @ cohesiveness relationship (mean  $r = 0.51$ ). In addition, their 49 study meta-analysis demonstrated several contributing factors to the cohesiveness-performance relation: group size (small groups apparently facilitate self-regulation and hinder social loafing), real groups (real groups exhibit stronger group dynamics than artificial groups), and task commitment (individual group members accept group standards of performance excellence).

The purpose of the present study is to explore the relationships between discriminatory climates of work groups (i.e., the acceptance or non-acceptance of diversity), cohesiveness, and performance in naturally occurring work groups. The previous work reviewed on cohesiveness and group performance would suggest a positive relationship between these two variables. While the relationship between discriminatory climates and group outcomes has not been specifically studied, theoretical models on attitude dissimilarity may support a negative relationship between discrimination (as a negative attitude) and group cohesiveness and performance (Terborg et al., 1976).

Table 1  
Sample Demographics

Demographic Variables	Military Sample (n=1128)	State Agency Sample (n=330)
Gender		
Female	2.5%	39.7%
Male	97.5%	60.3%
Race		
White	51.6%	85.4%
Non-White	48.4%	14.6%
Average Age	26.5 yrs	37.4 yrs
Organizational Level		
Non-Supervisory	89.0%	79.1%
Supervisory	11.0%	20.9%

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## **Methods**

### **Subjects**

The data for this study consisted of responses from two separate government organizations. The first sample was taken from a state government agency providing 330 respondents out of a total population of approximately 380 employees in the agency. The second sample consisted of 1128 respondents from an active-duty military unit located in the U.S. The unit had a population of 3842 individuals. Table 1 provides demographic data for the two samples. The two primary differences in the demographic profile of the two samples were the percent of females (39.7% in the state agency and 2.5% in the military unit) and the percent on non-whites (14.6% in the state agency and 48.4% in the military unit).

### **Measures**

The instruments for each of the samples contained self-report Likert-type items with five response categories. Anonymity of responses was guaranteed.

**Discriminatory Climates.** Each sample was surveyed with measures of gender discrimination (sexism) and racial discrimination (racism). The military sample completed the Military Equal Opportunity Climate Survey (MEOCS)(Landis, Dansby, & Faley, 1993) and the state agency completed a version of the MEOCS modified for non-military settings (Niebuhr, 1992). Both discriminatory climate scales consist of behavioral incident items which respondents rate on the probability of occurrence in their work unit. For example, one item states, "In meetings, usually the men are called upon to speak first." Respondents would then rate the probability of this occurring in their work unit on a five point scale ranging from 1="Very high chance" to 5="Almost no chance."

Table 2 presents the descriptive statistics for both data sets. Factor analyses confirmed the factor structures for the discrimination scales in both data sets. Table 3 provides the reliabilities of the measures and the intercorrelations among the study variables. These reliabilities are consistent with those obtained in the development of the original MEOCS instrument (Landis, Dansby, & Faley, 1993).

**Group Cohesiveness.** The military sample completed a peer cohesion instrument developed by Siebold & Lindsay (1994). The state agency sample completed the Seashore (1954) cohesiveness instrument. Factor analysis confirmed that the factor structures of the two instruments were unidimensional. Both devices focused on the "attraction to the group" and "commitment to the group task," criteria emphasized by Mudrack (1989) in a review of the cohesion measurement literature.

Table 2  
Descriptive Statistics

Scale	Military Sample (n=1128)			State Agency Sample (n=330)		
	No. of Items	Mean	Standard Deviation	No. of Items	Mean	Standard Deviation
Sexism	6	3.94	0.99	5	4.38	0.73
Racism	6	3.26	1.03	5	4.40	0.7
Cohesion	4	3.40	1.05	5	2.41	1.01
Group Perf.	3	2.32	1.04	3	2.12	0.99

Table 3  
Correlations among Study Variables

Variable	Variable			
	Cohesion	Perf.	Sexism	Racism
<u>Military Sample</u> (n=1128)				
1. Cohesion	(0.90)			
2. Group Perf.	0.51**	(0.78)		
3. Sexism	-0.23**	-0.16**	(0.88)	
4. Racism	-0.27**	-0.21**	0.50**	(0.85)
<u>State Government Sample</u> (n = 330)				
1. Cohesion	(0.87)			
2. Group Perf.	0.61**	(0.88)		
3. Sexism	-0.29**	-0.20**	(0.79)	
4. Racism	-0.25**	-0.16*	0.39**	(0.72)

\* P < .01

\*\* P < .001



Group Performance. The three-item group performance scales were identical for the two samples. The scales evaluated perceived quality and quantity of group output. Reliabilities for both sample scales are found in Table 3.

## Results

Table 3 presents the correlations among the two discriminatory climate variables, racism and sexism, and group cohesion and performance. In both sample groups, the correlations among these variables were significant, thus supporting the hypothesis that the presence of discriminatory climates would be negatively related to group functioning (i.e., cohesiveness and performance). Partial correlations among racism, sexism, cohesion, and performance, controlling for overall job satisfaction, were obtained for the military sample, and were also significant.

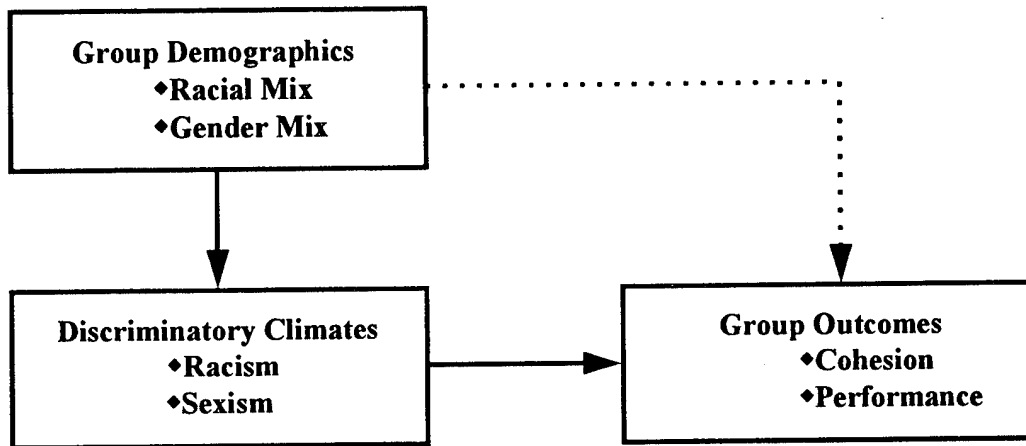
The correlations shown in Table 3 support a strong positive relationship between group cohesiveness and group performance for both samples ( $r = 0.51$  for the military unit and  $0.61$  for the state government agency). These  $r$ 's are consistent with the mean  $r$ 's found in the recent meta-analyses of cohesion and group performance studies (Evans & Dion, 1991; Mullen & Copper, 1994; Oliver, 1988).

## Discussion

The analysis of the data from both sample groups supports previous findings regarding the relationship between group cohesiveness and performance (Evans & Dion, 1991; Mullen & Copper, 1994; Oliver, 1988), and, in addition, supports the hypothesized relationship between discriminatory climates and group cohesiveness. To show a clearer picture of these relationships, Figure 1 displays a suggested model relating discriminatory climates, cohesiveness, and group performance.

The model shows a reciprocal relationship between cohesion and performance as supported by the recent meta-analysis of Mullen and Copper (1994). While a number of antecedent factors to group cohesiveness (Lott & Lott, 1965) and to racism and sexism (Sidanius, 1993) have been examined, a further analysis of the data suggests that gender and race of group members may also be important. Analyses of variance for the influence of respondents' race and gender on cohesion and performance were run for both samples. There was a significant effect of race on cohesiveness for both samples. Gender did not have a significant influence in either sample.

A second analysis of variance examined gender and race differences as factors affecting these two discriminatory climates. For both data sets, the non-white group perceived greater racism than did the white group. Likewise, females perceived greater sexism in the environment than did males. It thus appears that those in a position of less power (females or minorities) may be more sensitive to discrimination of any type (Niebuhr & Oswald, 1991). To illustrate, females perceived worse racism climates than did males in both samples, and non-whites perceived worse sexism than did whites in the military sample.



**Figure 1. Antecedents and Outcomes of Discriminatory Climates**

These two post-study analyses lend support to the idea that the group dynamics antecedent variables influence group outcomes, as shown in the model. The dotted line between racial and gender mix to group outcomes indicates a speculative relationship, since the present data only allowed for category comparisons (race and gender across work groups) rather than comparisons of race and gender within groups. While the sexual harassment literature has extensively examined the question of gender mix (Gutek, Cohen, & Konrad, 1990; Gutek & Morasch, 1982; Niebuhr & Boyles, 1991), there has been little research concerning gender mix in the cohesiveness area. Siebold and Lindsay (1994) did examine the influence of group racial mix on perceptions of group cohesiveness and found no effects. It could be argued, however, that Army platoons (their basic level of analysis) are too large for examining actual work group dynamics. Future research should address the race/gender demographics of work units and how they relate to discriminatory behaviors, group cohesion, and performance.

A commonality in studies of cohesiveness has been the presence of a positive group environment. This is variously reflected as a positive climate (Vraa, 1974), a feeling of group morale (Bollen & Hoyle, 1990), a respect for each other's views (Mael & Alderks, 1993), and group commitment to the task at hand (Mullen & Copper, 1994). In such a positive environment group members can communicate directly with one another and can actively interact with a minimum of negative influences, such as negative comments about each other and harassment of each other. Indeed, group members can expect harmonious relations (Wrightsman & Deaux, 1981) and can expect positive treatment from each other (Stephan, 1985). And members can actively involve one another in group performance (Wrightsman & Deaux, 1981). Moreover, the group self-regulation of its own performance (Mullen & Copper, 1994) can proceed more smoothly in a positive accepting environment. In many organizations, this positive environment occurs through diversity awareness training and organizational policies promoting a non-racist and non-sexist work arena (Cox, 1993; Morrison, 1992).

In the present study, the military data provided another factor which might also be considered in creating a positive environment. The military survey asked if the respondent had a close friend of another race. An analysis of this difference indicated a significantly lower perception of racism for those having a friend of another race (versus those that did not have such a friend). Consequently, multi-racial friendships both on and off the job may be a primary means of understanding and hence dealing with racism on the job. These friendships may be less fruitful for the military, however, who must rotate into new positions every two or three years, and who thus have difficulty maintaining friendships within the service (Knouse, 1991). On the other hand, civilian government agencies have longer tenure for local jobs and tend to recruit locally. Encouraging employee friendships through agency-sponsored activities, like social functions or informal get-togethers, may be a primary means of reducing racism and sexism.

The bi-directionality of the cohesion - performance relationship offers some interesting possibilities for building cohesion in diverse work groups. For example, the strong performance @ cohesiveness relationship indicated in the Mullen and Copper (1994) meta-analyses would support the idea that successful group performance might produce stronger interpersonal attraction and group pride, which in turn might lead to stronger cohesion. Conversely, early and persistent failures in group performance may lead to blame-placing on certain members with divergent views (e.g., minorities and females) and hence increase perceived racism and sexism. This would imply that early successes in group endeavors would be important for cohesion formation. Team building for diverse work groups should emphasize group work on short-duration tasks carrying a high probability of success early in the development of the group. As cohesion develops, more difficult tasks can then be attempted where the diverse talents of the group member mix can provide a greater payoff.

#### Limitations of the Present Study

The data in the present study were all from self-report items. Thus there is a concern about common method variance among the items, although general condemnations of self-report items are not warranted (Crampton & Wagner, 1994). Attempts, where possible, were made to control for common variance by partialing out factors, such as overall satisfaction. Further, there were correlations among other survey variables, not used in the present study, which were not significant. While not completely removing the concern about multicollinearity, the lack of significant relationships among similar perceptual measures in the present study does provide some relief (Kozlowski & Doherty, 1989).

In addition, the measure of group performance was perceptual rather than objective. As indicated earlier, the correlations found here between cohesiveness and performance were consistent with those obtained in previous studies using both perceptual and objective measures of performance.

### Future Research

Future studies should examine non-governmental populations and focus upon more objective measures of group performance. In addition, longitudinal studies are needed to refine the causal model proposed here.

Given the changing demographics of our society, other discriminatory climates (e.g., age and disability) and their influence on group processes should also be explored. Organizational adaptation to changing demographics requires the creation of organizational climates that are conducive to the acceptance of individuals who are different from the traditional employee.

Changing demographics in the American work force will continue to dictate increased diversity in work groups (Cox, 1993). This increased diversity inevitably produces some group "storming" (Tuckman, 1965) as individual group members attempt to establish their roles. Rather than seeking to create a cohesive but monolithic work group with very similar viewpoints, it is important to recognize that cohesiveness can also occur through divergent and multicultural perspectives, which provide added dimensions to group problem solving.

In essence, managers who are trying to meld the seemingly opposing forces of diversity and cohesiveness should emphasize the complementarity of different viewpoints among group members, rather than try to build cohesion by focusing upon narrow similarities held by all members. Diversity can then provide its "value added" benefits to group performance (Cox, 1993).

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